Common Reasons for Being Unable to Submit Jobs

Listed below are several common reasons why a job submission might not be successful.

AUID or GID not Authorized to Use a Specific Queue

If you get the following message after submitting a PBS job:

`qsub: Unauthorized Request`

It is possible that you tried submitting the job to a queue that is accessible only to certain groups or users. To find out, check the output of `qstat -fQ @server_name` and look for a users list called `acl_groups` or `acl_users`. If your group or username is not in the lists, you must submit your job to a different queue.

Note: To run jobs on Pleiades, Aitken, or Electra, use the pbspl1 server; on Endeavour, use the pbspl4 server.

You will also get this error if your project group ID (GID) has no allocation left. See Not Enough or No Allocation Left below for more information on troubleshooting this issue.

AUID Not Authorized to Use a Specific GID

If you get the following message after submitting a PBS job:

`qsub: Bad GID for job execution`

It is possible that your Agency User ID (AUID) has not been added to use allocations under a specific GID. Please ask the principal investigator (PI) of that GID to submit a request to support@nas.nasa.gov to add your AUID under that GID.

Queue is Disabled

If you get the following message after submitting a PBS job, submit the job to a different queue that is enabled:

`qsub: Queue is not enabled`

Queue Has a max_queued Limit

If you get the following message after submitting a PBS job:

`qsub: would exceed queue's generic per-user limit`

It is possible that you tried submitting the job to a queue that has a `max_queued` limit—a specified maximum number of jobs that each user can submit to a queue (running or waiting)—and you have already reached that limit.

Currently, the Pleiades `devel` queue is the only queue that has a `max_queued` limit of 1.

Resource Request Exceeds Resource Limits

If you get the following message after submitting a PBS job:

```
qsub: Job exceeds queue resource limits
```

Reduce your resource request to below the limit or use a different queue.

Queue is Unknown

Be sure to use the correct queue. For Pleiades, Aitken, and Electra jobs, use the common queue names **normal, long, vlong,** and **debug**. For Endeavour jobs, use the queue names **e_normal, e_long, e_vlong,** and **e_debug**.

The PBS server pbspl1 recognizes the queue names for both Pleiades/Aitken/Electra and Endeavour, and will route them appropriately. However, the pbspl4 server only recognizes the queue names for Endeavour jobs. For example, if you submit a job to pbspl4 and specify a Pleiades/Aitken/Electra queue, you will get an error, as follows:

```
pfe21% qsub - q normal@pbspl4 job_script
qsub: unknown queue
```


Not Enough or No Allocation Left

An automated script checks GID usage each day. If usage exceeds a GID's allocation, the GID is removed from the PBS access control list and you will no longer be able to submit jobs under that GID.

You can check the amount of allocation remaining using the **acct_ytd** command; for more information, see Job Accounting Utilities. In addition, if your PBS output file includes a message stating that your GID allocation usage is near its limit or is already over its limit, ask your PI to request an increase in allocation.

Once the request for increased allocation is approved and added to your account, an hourly script will automatically add your GID back to the PBS access control list.